

***United States Court of Appeals  
for the Second Circuit***



**APPELLANT'S  
REPLY BRIEF**



# 74-1050

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**United States Court of Appeals**  
**FOR THE SECOND CIRCUIT**

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THE GENERAL TIRE & RUBBER COMPANY,  
*Plaintiff-Appellant,*  
v.  
JEFFERSON CHEMICAL COMPANY, INC.,  
*Defendant-Appellee.*

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P/S

ON APPEAL FROM A JUDGMENT OF THE UNITED STATES DISTRICT  
COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

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**REPLY BRIEF OF PLAINTIFF-APPELLANT**

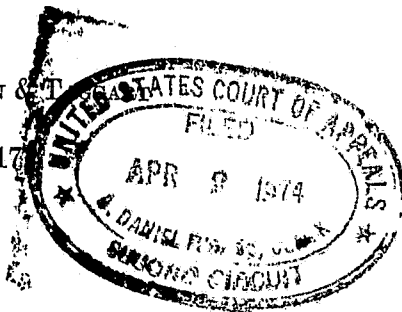
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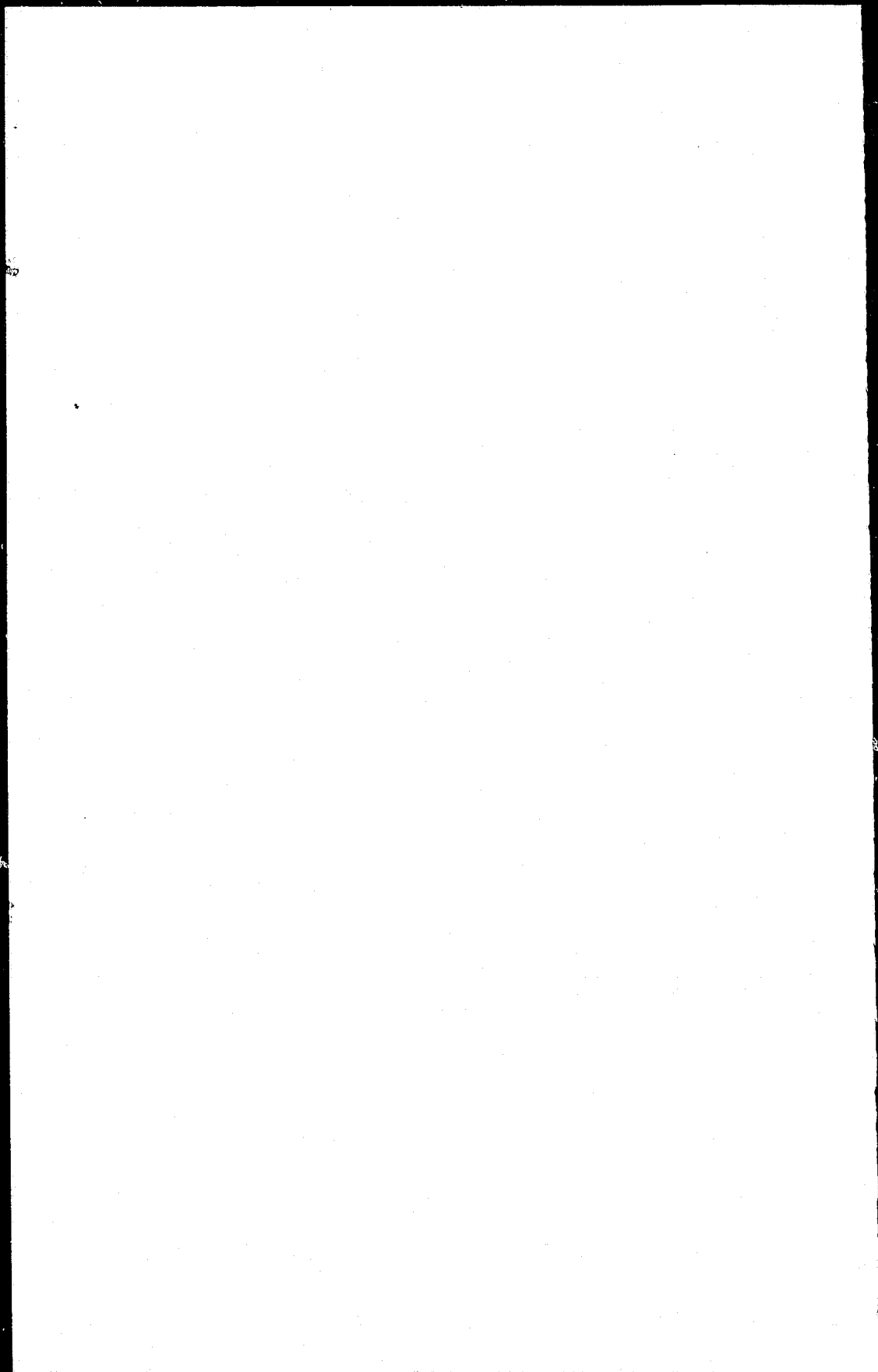
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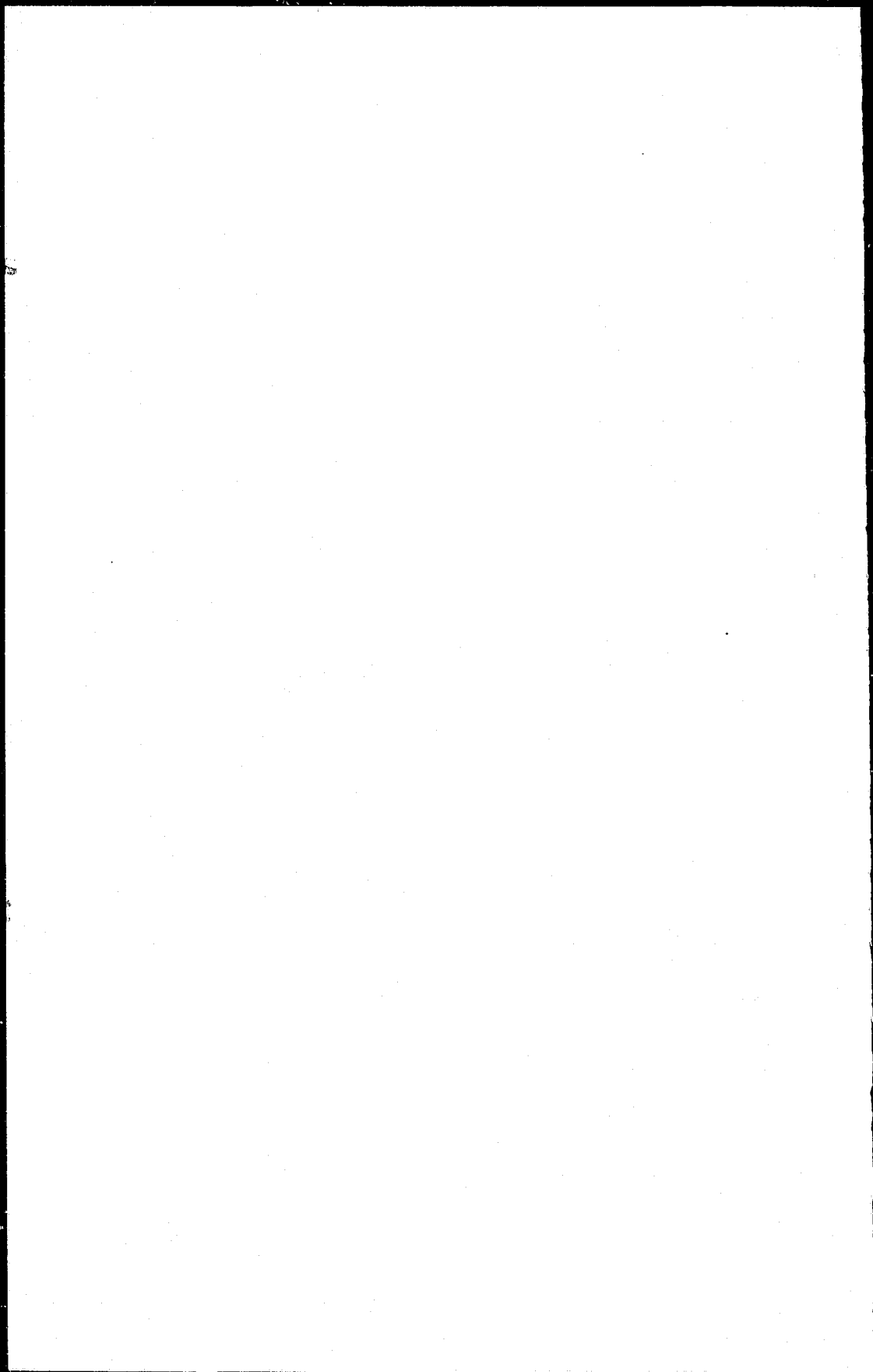
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**REPLY BRIEF OF PLAINTIFF-APPELLANT**

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**Introduction**

This brief is in reply to Jefferson's "Brief for Defendant-Appellee." General's position on the specific issues raised for review is set forth in its main brief and General relies thereon, as amplified in this Reply Brief, to show that the District Court clearly erred both as a matter of law and with respect to certain critical findings of fact.

**I. The rule that undisclosed properties may not be relied on for patentability, set forth in the *Carter-Wallace* case, is directly applicable to the facts in this case.**

Jefferson has not come to grips with the problem presented to it in Point I of General's main brief. It has failed to specify in its brief exactly where the Heiss patent discloses any of the unexpected properties of propylene oxide urethanes, relied on by the District Court as the basis for patentability.

Absence of disclosure of such properties is the precise ground on which General contends an error of law was committed.<sup>1</sup> As set forth in General's main brief (pp. 8-13), validity of the patent was sustained only because Judge Carter found that PO based urethanes, as contrasted with EO based urethanes, possessed three unexpected properties:

- a) less water sensitivity
- b) less subject to hydrolysis, and
- c) less subject to crystallization.

Reliance on these properties as a basis for patentability was error because these properties are *undisclosed* in the patent. *Carter-Wallace, Inc. v. Otte*, 474 F.2d 529, 540 (2 Cir. 1972), cert. denied, 412 U.S. 929 (1973).

If such properties are disclosed, it would have been a simple matter for Jefferson to cite the column and lines of the Heiss patent comprising the disclosure. Jefferson's

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<sup>1</sup> Reversal is not contingent on holding the District Judge's findings of facts to be clearly erroneous, as Jefferson suggests (Jeff. brief, pp. 10-13). The question of the validity of the patent is a question of law and this Court may always determine whether the correct legal standards have been applied. *Gross v. JFD Manufacturing Co., Inc.*, 314 F.2d 196, 198 (2 Cir. 1963), cert. denied, 374 U.S. 832 (1963).

failure to do so is an omission that is profound. Instead of specificity, Jefferson resorts to incorrect and baseless assertions that the Heiss patent *does* disclose the unexpected properties in a futile attempt to distinguish *Carter-Wallace*. The statement at page 26 of its brief that:

“... unlike *Carter-Wallace*, the Heiss patent discloses the superior properties of the claimed Heiss invention.”

is completely unsupported.<sup>2</sup>

The testimony of Jefferson's expert that the Heiss patent does *not* disclose any differences between PO urethanes and EO urethanes is a dispositive admission (408a). See also pages 10-11 of General's main brief.

To avoid the consequences of the ruling in *Carter-Wallace* Jefferson even goes so far as to represent to this Court that the District Court *found* the water resistant property of the PO based urethanes to be disclosed in the patent. Citing page 16a as its authority, Jefferson states:

“He [Judge Carter] found the patent disclosed the uses of the Heiss polyurethanes and its water resistant property. (16a) Based on that finding, he considered the evidence of superiority and concluded that superi-

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<sup>2</sup> The statement in the second paragraph of the Heiss patent (Px 1, 501a) that products of the invention are suitable as “... impregnants for fibrous material to impart water resistance, ...” is not a disclosure of the superior properties of PO based urethanes over EO based urethanes. The statement was in the application as filed (510a) and applies to the entire gamut of urethanes made with any of a multitude of different polyols enumerated at column 1, line 58 to column 2, line 32 (501a). Any water resistant properties are attributable to the presence of the plasticizer (e.g., Aroclor) (326a). In fact, the only example in the patent of an impregnant for fibrous material is Example XX of the patent where the impregnant is an EO based urethane. By contrast, the Price patent discloses the advantages of PO based urethanes over EO based urethanes (DX A, 840a at col. 2, ls. 63-68).

ority had been established and that the Heiss invention was also valid on that basis." (Jeff. brief, p. 30)

Examination of page 16a, and indeed the entire District Court opinion, shows that Judge Carter *never* made any finding that the Heiss patent "disclosed the . . . water resistant property" of the propylene oxide based polyurethanes claimed by Heiss.

In a further attempt to distinguish *Carter Wallace*, Jefferson states, at the bottom of page 28 of its brief, that

" . . . the District Court's opinion is supportable on two independent grounds."

As its first ground, Jefferson states at p. 29 of its brief:

" . . . that the Heiss patent was unobvious without reference to any evidence regarding the superiority of the Heiss polyurethanes."

But Jefferson cites no instance in which the District Court so found. Indeed, in support of its first ground, Jefferson belies its assertion by emphasizing, as did the District Court at page 27a, the comparative water resistant properties of PO based urethanes over EO based urethanes. This constitutes reliance on evidence regarding superiority.

As its second ground, set forth at page 30 of its brief, Jefferson states (incorrectly) that Judge Carter found the patent nonobvious on the basis of his *finding* that Heiss disclosed the "water resistant property." So it all comes back to reliance on the comparative superiority of the water resistant properties of the claimed PO based urethanes. There is no disclosure in the Heiss patent of any such comparative superiority.

Jefferson's assertion that the Heiss patent discloses "beneficial uses" is irrelevant to the issue raised. The *Carter-Wallace* patent also disclosed beneficial uses for the claimed product (i.e., as an anti-convulsant and as a

muscle paralyzant) but it was held that these uses were obvious from the prior art (474 F.2d at 543). The critical holding in *Carter-Wallace* was that the unexpected tranquilizing property, which distinguished the product from the prior art, could *not* be relied on as a basis for patentability because that property was not disclosed in the patent.

Applying the *Carter-Wallace* principles to the instant case, the uses disclosed in the Heiss patent indiscriminately apply to all polyurethanes<sup>3</sup> including polyester urethanes, polyether urethanes, urethanes made with diols, triols or tetrols as well as EO and PO based urethanes. These uses are also the same uses described in the prior art. For example, Jefferson admits that Bayer made foams and adhesives from his polyester materials (Jeff. brief, p. 3). Windemuth discloses that alkylene oxide based urethanes may be used to make plasticizers, spongy materials (i.e., foams), auxiliaries in the textile industry, lacquers (protective coatings), and plastics both soluble and *insoluble* (Px 5; 696a, col. 1, ls. 31-40, col. 2, ls. 14-27).

Thus, the uses set forth in Heiss are the obvious uses to which all polyurethanes are put. The features which the District Court found that distinguished PO based urethanes and rendered them patentable over EO based urethanes, were the unexpected properties of less sensitivity to water, hydrolysis and crystallization. These properties are not disclosed in the Heiss patent and therefore it was error to rely on them to uphold validity of that patent. As in *Carter-Wallace*, Heiss failed to disclose to the public the unexpected properties on which the Court relied.

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<sup>3</sup> The Heiss patent states, at Col. 1, l. 58 to col. 2, l. 32 (501a) that urethanes can be made from esters, ethers, alkylene oxides or other alcohols. Example IX (503a) uses castor oil which results in a polyester urethane (404a).

The four cases cited by Jefferson at pages 28-31 are inapplicable. *Standard Coil Products Co. v. General Electric Co.*, 306 F.2d 319, 323 (2 Cir. 1962) relates to a disclosure of scientific principles—not unexpected properties. The three additional cases, *In re Lunsford*, 357 F.2d 385 (C.C.P.A. 1966), *In re Zenitz*, 333 F.2d 924 (C.C.P.A. 1964) and *In re Khelghatian*, 364 F.2d 870 (C.C.P.A. 1966) are inapposite because the unexpected properties were explicitly disclosed in the application itself or in affidavits forming a part of the patent application supporting papers.<sup>4</sup>

Jefferson's argument with respect to the *Carter-Wallace* case is unsupportable. This case is undistinguishable from *Carter-Wallace* and should be controlled by it.

## II. The Windemuth patent anticipates the Heiss Claims.

### A. Windemuth Is Prior Art to Heiss

Jefferson's brief intimates, in a footnote (at page 17), that Windemuth is not prior art to Heiss and states that the District Court did not have to decide whether Windemuth is prior art. The plain fact is that the District Court did specifically find and conclude that Windemuth is prior art. The Court stated:

"It [Windemuth] is cited as prior art in the issuance of the Heiss patent with the evident acquiescence [of] Heiss, and I see no need at this late date to depart from that determination by the Patent Office." (23a)

"Windemuth was prior art . . ." (25a)

". . . its [Windemuth's] teachings do constitute prior art." (25a)

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<sup>4</sup> *Zenitz* and *Khelghatian* are mentioned in the *Carter-Wallace* opinion at pages 540 and 541 respectively.

Heiss' acquiescence to Windemuth as prior art when the Patent Office cited it as such (Px 2, 658a-667a), prevents Jefferson from now taking a contrary position.<sup>5</sup>

Jefferson also states at footnote 9 that the District Court made all findings necessary to remove Windemuth as prior art. This is not true. The District Court only stated that Heiss had a concept on September 14, 1951 and performed a successful experiment in September 1952.<sup>6</sup> As a matter of law, such findings are inadequate to remove Windemuth as prior art. Windemuth's effective date is May 6, 1952. The critical date to remove Windemuth as prior art is Heiss' date of reduction to practice, which, if it is assumed to be September 1952, is too late. Reliance on the earlier date of conception to remove Windemuth is improper unless Heiss also proves that in reducing the invention to practice, he exercised *diligence* beginning with at least a date earlier than Windemuth's effective date and continuing to the actual reduction to practice on September 19, 1952. *Scharmann v. Kassel*, 179 F.2d 991, 996 (C.C.P.A. 1950); *Riche v. Permutit Co.*, 47 F. Supp. 275, 278 (D. Del. 1942), *aff'd per curiam* 135 F. 2d 922 (3 Cir. 1943).

There is no finding as to diligence and diligence was not proved. Therefore, Windemuth is prior art.

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<sup>5</sup> In fact, Heiss' attorney, Mr. Upchurch was fully familiar with the Windemuth patent application (355a). Both the Windemuth and Heiss patents issued to Mobay Chemical Company as a one-half owner (Px 1, 501a at l. 6; Px 5, 696a, l. 7). And Mr. Upchurch (Mobay's patent attorney) knowing the facts of both patents, stated: (Px 40, 828a)

"I am not aware of any prior art which is any more pertinent than the Windemuth et al. Patent U.S. 2,948,691; . . ."

<sup>6</sup> Although Jefferson seeks to establish September 19-22, 1952 as the date for reduction to practice, during the Heiss-Price interference, Heiss stated under oath that the invention was reduced to practice on or about January 6, 1953 (Px 27, 801a). Judge Carter's comment in footnote 8 at page 20a was wrong.

### B. Windemuth Discloses Propylene Oxide

Jefferson correctly states the question under 35 U.S.C. § 102(e) (Jeff. brief, pp. 19-20):

"The question is whether or not one skilled in the art would be told by reading Windemuth that propylene oxide was embraced within its teaching."

The record conclusively establishes that to one skilled in the art Windemuth's instruction to use "alkylene oxides" embraces propylene oxide within its teaching.<sup>7</sup> See General's main brief, pp. 15-18.

Jefferson makes the assertion, at page 18 of its brief, that General and its expert "pick and choose" parts of Windemuth and ignore significant portions of the Windemuth patent. We deny this. The parallel comparison of Windemuth's disclosure and Heiss' claim 3 (General's main brief, p. 14) sets forth appropriately the relevant portions of Windemuth's disclosure from the first two columns of his patent. By contrast, it is Jefferson that seeks to limit consideration to the specific examples of Windemuth and minimize Windemuth's breadth of disclosure. Jefferson would limit Windemuth's clear disclosure of "alkylene oxides" to just one alkylene oxide, EO. This is wrong. One cannot ignore the broader, instructive disclosure of a reference and rely only on the specific examples. *Application of Courtright*, 377 F.2d 647, 651 (C.C.P.A. 1967).

*In re Luvisi*, 342 F.2d 102, 107 (C.C.P.A. 1965), cited by Jefferson, is inapposite since in that case the prior art patent taught use of a large number of generic compounds, each of which included a large number of species. In the instant case, the undisputed evidence of both parties' ex-

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<sup>7</sup> Indeed, Jefferson at page 32 of its brief, in arguing against derivation from Price, states that "the Heiss patent application had claims drawn to alkylene oxide condensates which cover propylene oxide condensates."



perts is that, as a practical commercial matter, the limited class of compounds embraced by alkylene oxides consists of EO, PO and one or two others and that EO and PO are the two most prominent alkylene oxides (84a-85a; 88a; 139a; 419a-420a). Under these circumstances, the disclosure is explicit, but even implicit disclosure will invalidate. See *Monsanto Co. v. Rohm and Haas Co.*, 312 F.Supp. 778, 796-797 (E.D. Pa. 1970), aff'd, 456 F.2d 592 (3 Cir. 1972), cert. denied, 407 U.S. 934 (1972).

Jefferson's argument on page 19 of its brief, quoting Judge Carter's language at 24a regarding the disclosed properties of Windemuth's product, is inapplicable as an argument against a Section 102 anticipation for two reasons. Under 35 U.S.C. 102, the failure of a prior art patent to recognize superior properties does not detract from its anticipatory effect. *General Electric Co. v. Jewel Incandescent Lamp Co.*, 326 U.S. 242, 247 (1945). Secondly, Jefferson makes much of the fact that Windemuth is directed to swellable or *soluble* polyether urethanes (Jeff. brief, pp. 4, 16, 19, 22) which, Jefferson contends "leads away" from using PO. But Jefferson again "picks and chooses" portions of Windemuth which support its desired conclusion and ignores those portions which contradict its conclusion. Windemuth teaches that products can be made having properties which can be varied depending on the starting materials. It specifically teaches the making of *insoluble* products (Px 5, 696 a, col. 1, l. 58, col. 2, ls. 11, 18-23, 45). Windemuth Examples 1, 2 and 3 show products which are *insoluble*. In fact, the very quotation of Judge Carter (at 24a) relied on by Jefferson, refers to a product which is "generally insoluble in water". Therefore, the contention that Windemuth "leads away" from using PO is untenable.

Windemuth is a full anticipation of Heiss under 35 U.S.C. 102(e).

### III. The alleged invention is obvious from the prior art under 35 U.S.C. § 103.

It is respectfully submitted that the District Court's finding of unobviousness is predicated only on its consideration of unexpected properties. Because these properties were not disclosed, it was error to consider them or to rely on them when evaluating the question of obviousness under 35 U.S.C. § 103. The District Court also erred because, in considering the scope and content of the prior art, it treated each prior art patent separately, and failed to combine the teachings of Windemuth and Sokol as well as the teachings of Bayer and Hill.<sup>8</sup>

#### A. Windemuth and Sokol

Windemuth teaches use of art-known alkylene oxide condensates to make polyurethanes (Px 5, 696a, col. 1, ls. 20-25). If a chemist wished to know (in the unlikely event that he did not already know it) what Windemuth means by "alkylene oxide" condensates, he need only read the earlier Sokol patent<sup>9</sup> (Px 6, 702a, col. 1, ls. 4-10; col. 2, ls. 2-14) which explains that they are EO condensates and PO condensates (424a-425a). Sokol further exactly describes how to make them (702a-705a). That Sokol has nothing to do with the production of polyurethanes is irrelevant here. Sokol's usefulness is to show what Windemuth meant by his reference to art-known condensates made by addition

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<sup>8</sup> Combination of references is proper to show obviousness under 35 U.S.C. § 103. *Deep Welding, Inc. v. Sciaky Bros., Inc.*, 417 F.2d 1227, 1234 (7 Cir. 1969).

<sup>9</sup> The presumption of validity is dissipated where pertinent references have not been considered. The Bayer article, the Hill patent and the Sokol patent were not cited against the Heiss application by the Patent Office and therefore presumed not to have been considered. *Karr v. Botkins Grain & Feed Co.*, 329 F.Supp. 411, 414 (S.D. Ohio 1970). Cited references are listed at the end of each patent (See Px 1, 506a).

of "alkylene oxides" to polyfunctional alcohols. Failure of the District Court to combine Windemuth and Sokol was therefore an error of law.

### B. Bayer And Hill

Jefferson's brief, at page 23, states that the Bayer article ". . . relates almost exclusively to making polyester urethanes . . .", but avoids recognition that the Bayer article also specifically discloses polyether urethanes (Px 7B, 723a; 91a-92a; 144a; 431a-432a). Bayer also teaches using triols or tetrols for cross-linking (432a). What Bayer does *not* disclose is using PO.<sup>10</sup>

Hill (Px 9, 740a) discloses using PO to make polyether polyurethanes but uses a diol and cross-links by adding water. What Hill does not disclose is using triols or tetrols to cross-link.

By combining Bayer and Hill, it would be obvious to one skilled in the art that Hill's cross-linking could also be achieved by using triols or tetrols, as taught in Bayer. No ingenuity is required to take this step. See *Gross v. JFD Manufacturing Co., Inc.*, *supra*, 314 F.2d at 199.

The District Court considered Bayer and Hill separately and noted the deficiencies of each. It is clear, however, that there was no attempt to determine whether, in combination, the deficiency of one was cured by the other. This was error.

The legal standard for determining obviousness under 35 U.S.C. § 103 was not properly applied.

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<sup>10</sup> If the Bayer article had disclosed PO, it would have been a complete anticipation under 35 U.S.C. § 102.

#### IV. Dr. Price is the prior inventor.

##### A. The Proof of Prior Invention By Dr. Price

General's main brief establishes that, by any standard of proof both the oral testimony and documentary evidence submitted at the trial prove that Dr. Price is the prior inventor.

In its brief, (at p. 15) Jefferson distorts General's position. The letter (Px 16, 780a) dated April 7, 1949 from Dr. Price to G. H. Swart was not advanced as a conception of the invention, but only as background to the making of the invention by Dr. Price and to show by unquestioned documentary proof Dr. Price's plan to use propylene oxide as the backbone of his experiments. Use of propylene oxide, as established by the opinion of the District Court, is the heart of the invention.<sup>11</sup>

Conception and reduction to practice of the invention itself is shown by Herbst's report to Dr. Price on April 19, 1949 (Px 18, 782a) and again by the corroborating testimony of Dr. Price and Dr. Herbst at the trial.

Although the District Court found that the reports were "disjointed and incomplete and do not make explicit that the process here in question was successfully concluded" (29a), no reasons are given for this conclusion. It is respectfully submitted that, to a chemist, there is nothing disjointed or incomplete about the report.

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<sup>11</sup> Dr. Colburn also agreed (369a):

"These various inventions reside not in cross-linking, but in the material selected to be cross-linked and in the manner in which the cross-linking is done."

Dr. Price selected the material—propylene oxide—by April 7, 1949 and the manner of cross-linking—by use of pentaerythritol (4 OH groups)—was completed by April 19, 1949.

The report (Px 18, 782a),<sup>12</sup> signed by Dr. Herbst, establishes the preparation of the condensate of propylene oxide and pentaerythritol and its reaction with an excess of polyisocyanate to form products that were described as hard brown polymer, hard black polymer, sticky black gum and rubbery material. Each one of these products is useful (176a-177a) and represents a complete and satisfactory reduction to practice of the polyurethane now claimed by Heiss (187a).

Jefferson's attack on the report is based on its assertion that Herbst did not use an *excess* of diisocyanate in his experiments. The report itself states that "excs MDI" was used (second entry under MDI column). Dr. Price testified that the entry meant that a "large excess of MDI" was used (165a; 186a-187a).

In addition, use of an excess of diisocyanate was asured by the manner in which the experiments were performed (446a-447a). See also General's main brief, pp. 25-26.

Moreover, the final result of the Herbst experiment—obtaining a solidified end product—is conclusive that an excess of diisocyanate was used. Both the PO condensate and the diisocyanate are liquids. Dr. Price and Dr. Mark each testified that the conversion of these liquids into a solidified product (also referred to as a network structure or cross-linked product) could only have been done by use of an excess of diisocyanate (122a; 175a; 447a). If, instead of an excess diisocyanate, an excess of the PO condensate

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<sup>12</sup> Jefferson relies on a letter of T. A. TeGrotenhuis, Price's patent counsel, stating that he did not believe Price would prevail in the interference on the basis of proof of experiments at Notre Dame. The basis for this belief is not given and Dr. Price disagreed with it (210a). In any event, the attorney's "belief" cannot displace the documentary evidence of the experiments and corroborating oral testimony.

were present, then the product would have remained liquid. Dr. Colburn also conceded this point (450a):

"If you don't have enough TDI, I agree that you won't get cross-linking and the material won't harden and gel, . . ."

Then he, and now Jefferson in its brief, attempted to explain the hardening on the basis of some assumed peculiarity in the PO condensate despite the fact that Herbst did make and use a propylene oxide condensate of a tetrol.

**B. Jefferson's "Mathematical Certainty" is Based on Unfounded Assumptions And Speculation**

At page 16 of Jefferson's brief, it contends that Dr. Colburn showed with "mathematical certainty" that Herbst could not have used an excess of diisocyanate in April 1949. The trouble with Dr. Colburn's "mathematical certainty" is that his calculations are *not* based on the information reported in Px 18, but rather on another experiment which is set forth as Example 3 of the Price patent some four years later. Jefferson failed to establish any connection between Px 18 and Example 3 of the Price patent.<sup>13</sup> On this point Dr. Herbst testified (226a):

"Q. I hand you Defendant's Exhibit A, Dr. Herbst, and I will ask you to look at Example 3. Did Example 3 come from your work?

A. I can't answer your question. I didn't write the patent application."

Indeed, Dr. Herbst's work on this project terminated in 1949, long before the Price patent application was pre-

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<sup>13</sup> Validity of the Price patent is not in issue in this case. But there is nothing inconsistent with General's position that the Price patent is valid and the Heiss patent is not. The Price patent contains more limited claims and is based on a 1949 invention.

pared so he was not in a position to know where the figures in Example 3 of the Price patent came from (212a). Thus, it is mere speculation and unfounded assumption to extrapolate the quantities used in Example 3 of the Price patent to challenge the work reported in Px 18.

Moreover, Dr. Colburn's calculations erroneously assume that *all* the pentaerythritol initially placed in the vessel to make the condensate was used in the chemical reaction to make the condensate. The plain fact, clearly reported in Px 18 (782a), is that 0.5 grams of pentaerythritol was unreacted and was actually recovered. Dr. Colburn's calculations ignore this factor. Thus, since Dr. Colburn's underlying assumptions are without foundation, it follows that his calculations are valueless, except for purposes of obfuscation.

Furthermore, although Dr. Colburn has a laboratory and has the capability to conduct experiments (360a-361a; 416a) his testimony is not based on any experimental work that he did. He appears not to have tried to duplicate the Herbst experiments set forth in Px 18, nor to repeat Example 3 of the Price patent which served as the basis for his calculations. Instead he preferred to speculate, question and doubt.

It is submitted that the testimony of Herbst and Price of what they did and what actually happened and Herbst's report far outweighs any present day speculations and doubts of Jefferson's expert.

### **C. Heiss Derived the Claimed Invention From Price**

The invention *now claimed* by Heiss is for PO based urethanes as distinguished from EO based urethanes, and patentability was sustained on the proposition that PO based urethanes have certain unexpected properties not found in EO based urethanes. Heiss nowhere dis-

closes that distinction.<sup>14</sup> Heiss derived that distinction from the Price patent, and after that derivation, he copied its claims. Jefferson's response to this argument—that Heiss had claims drawn to alkylene oxide condensates embracing both EO and PO—in no way negates the conclusion that Heiss derived the distinction of PO over EO from Price. It was five and one-half years down the road in the prosecution of the Heiss application before Heiss' attorney saw the Price patent and learned of the distinction between EO and PO based urethanes.

The conclusion from these undisputed facts is clear. Heiss did not have the invention, *now claimed*, when his application was filed. Claiming it in 1959 for the first time was not a logical development from his application, but instead was derived from reading the Price patent.

The words of Mr. Justice Bradley in *Atlantic Works v. Brady*, 107 U.S. 192, 200 (1882), are particularly apt:

“ . . . Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts.”

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<sup>14</sup> Indeed the patent specifically treats EO and PO as equivalents (63a; 75a; 408a-409a).



## V. The plasticizer is essential to what Heiss regarded as his invention

### A. Judge Carter Made No Findings As To The Merits Of General's "Plasticizer" Argument

Jefferson has been less than candid with this Court in stating in its brief, at page 34, that "Judge Carter and the Patent Office recognized" that the Heiss patent claims do not require a plasticizer.

In the first place, Judge Carter has made no findings whatsoever, of fact or law, on the defense presented by General under 35 U.S.C. § 112. Except for a factual recounting of certain events in the interference proceedings between Heiss and Price (20a-21a), Judge Carter's opinion is silent on the merits of General's argument that the Heiss claims are invalid for failure to include an essential component of his invention.

Secondly, although a patent examiner denied General's motion to dissolve the interference during the early stages of the interference,<sup>15</sup> the Board of Patent Interferences later effectively *reversed* the Examiner's decision (Px 27, 799a-815a). General's early motion before the Examiner was based on two distinct grounds (DX I, 907a). Argument as to ground (a), set forth at 907a-916a, was based on the proposition that Heiss did not have sufficient disclosure to support the molecular weight limitation set forth in the count of the interference. Argument as to ground (b), set forth briefly on only one page (DX I, 917a), contended that the plasticizer was an essential ingredient of the Heiss invention. The Examiner denied the motion

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<sup>15</sup> A motion to dissolve is similar to a motion for judgment on the pleadings or a motion for summary judgment. Evidence outside the Patent Office records, such as evidence of what Heiss regarded as his invention, is not permitted. Rule 231, Rules of Practice for the United States Patent Office.

on both grounds (a) and (b) (DX J, 922a). After testimony and evidence was presented, the Board of Patent Interferences disposed of the case by holding that Heiss did not have sufficient disclosure to support the molecular weight limitation of the count (Px 27, 799a-815a), thereby effectively reversing the Examiner's decision based on ground (a). The Board did not treat other questions. Thus, the second argument with respect to the plasticizer was never considered by the Board.

Jefferson's reliance on a patent examiner's opinion on a preliminary motion, limited as to the evidence, is misplaced. In the context that the patent examiner's decision was wrong on the major ground asserted by General, and the other one having not been considered by the reviewing tribunal, Jefferson's statement that "the Patent Office recognized" that the patent does not require a plasticizer, is an overstatement.

#### **B. Heiss Did Not Regard The Use Of Plasticizer In His Invention As Optional**

Jefferson's position, at page 35 of its brief, that the plasticizer does not take part in the chemical reaction, is irrelevant to the question of whether the invention, as Heiss regarded it, required the presence of a plasticizer. The project Heiss was working on was to solidify the plasticizer and for that, the plasticizer is a necessary ingredient. As Heiss' attorney stated, the reaction "must be brought about in the presence of the plasticizer" (Px 2, 560a). The evidence, from Heiss' initial experiments to the issuance of foreign patents<sup>10</sup> in 1958 shows that the invention was regarded by Heiss to include a plasticizer

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<sup>10</sup> Jefferson seeks to divert attention from the effect of these foreign patents (See General's main brief p. 38) by reference to a U.S. patent issued to Heiss, No. 3,143,517, *which was not put in evidence* (308a) and which Jefferson admits has no relevance to this case (Jeff. brief, pp. 34-35).

as an essential component. (See General's main brief, pages 31-40). The evidence includes Heiss' own invention disclosure (Px 60, 830a) as well as a clear delineation of the invention by Dr. Saunders, who was also Heiss' supervisor (Px 28, 816a; 244a).

Jefferson suggests, in footnote 17, that Heiss' experiment on September 19, 1952, which it now alleges to be Heiss' first reduction to practice, shows an example of the invention conducted in benzene which is a solvent, not a plasticizer. But this experiment was a failure. Jefferson's flat statement that there is no evidence to support this fact is wrong. Heiss himself testified that (296a):

" . . . it gelled up our adhesive solution, which we didn't want, so we didn't like that part of it . . . "

In fact, Heiss previously stated under oath that his reduction to practice was on January 6, 1953 (Px 27, 801a; 339a-340a)—not in September 1952. Therefore he must have regarded his September 1952 experiments as a failure. And, of course, January 6, 1953 was the beginning of an intensive project to investigate solidification of plasticizers (See General's main brief, pages 33-35).

Jefferson attempts to distinguish *U. S. Industrial Chemicals, Inc. v. Carbide & Carbon Chemicals Corp.*, 315 U.S. 668 (1942), by asserting that ". . . Heiss kept on narrowing his two component invention." (Jeff. brief, p. 39). As has been shown in General's main brief (pp. 31-40), the plasticizer was an essential ingredient. Therefore, it was a three component invention. Omission of the plasticizer from the claims broadens rather than narrows the claims.

**CONCLUSION**

**The judgment of the District Court should be reversed and judgment entered in favor of General.**

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Ans. P.

*John*

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J. C. L. Jr.